

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of growing spermatogonial stem cells, which comprises growing spermatogonial stem cells by culturing the spermatogonial stem cells for at least 3 to 4 weeks using a medium containing glial cell-derived neurotrophic factor (GDNF) or an equivalent thereto and leukemia inhibitory factor (LIF).

2. (Original) The method of growing spermatogonial stem cells of claim 1, wherein the above-described medium further contains at least one of epidermal growth factor (EGF) and basic fibroblast growth factor (bFGF).

3. (Previously Presented) The method of growing spermatogonial stem cells of claim 1, wherein the above-described medium further contains serum.

4. (Previously Presented) The method of growing spermatogonial stem cells of claim 1, which further comprises using feeder cells.

5. (Previously Presented) The method of growing spermatogonial stem cells of claim 1, which comprises using mammal-derived spermatogonial stem cells.

6. (Previously Presented) The method of growing spermatogonial stem cells of claim 1, wherein the above-described glial cell-derived neurotrophic factor (GDNF) or an equivalent thereto is contained at a concentration of 0.5 to 50 ng/ml in the above-described medium.

7. (Previously Presented) The method of growing spermatogonial stem cells of claim 1, wherein the above-described leukemia inhibitory factor (LIF) is contained at a concentration of 10^2 to 10^4 units/ml in the above-described medium.

8. (Previously Presented) The method of growing spermatogonial stem cells of claim 2, wherein epidermal growth factor (EGF) is contained at a concentration of 0.5 to 50 ng/ml in the above-described medium.

9. (Previously Presented) The method of growing spermatogonial stem cells of claim 2, wherein the above-described basic fibroblast growth factor (bFGF) is contained at a concentration of 0.5 to 50 ng/ml in the above-described medium.

10. (Previously Presented) The method of growing spermatogonial stem cells of claim 3, wherein the above-described serum is contained at a concentration of 0.1 to 5(v/v)% in the medium at the start of cultivation of the above-described spermatogonial stem cells, and at a concentration of 0.1 to 20(v/v)% in the medium after passage of the above-described spermatogonial stem cells.

11. (Previously Presented) The method of growing spermatogonial stem cells of claim 4, wherein the above-described feeder cells are used by 4 weeks after the start of cultivation at latest.

12.-27. (Canceled)